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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,534	02/17/2006	Yasuhiro Nukisato	11630545PUS1	5031

2292 7590 03/28/2007
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EXAMINER

LE, TUNG X

ART UNIT	PAPER NUMBER
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2821

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/28/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/28/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/568,534	NUKISATO ET AL.	
	Examiner	Art Unit	
	Tung X. Le	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/17/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is a response to the Applicant's communication filed on February 17, 2006. In virtue of this filing, claims 1-8 are currently presented in the instant application.

Claim Objections

2. Claims 2-3 are objected to because of the following informalities:

Claim 2, lines 9-10, "a start circuit for generating a high voltage pulse and for superimposing the high voltage pulse on the AC voltage" should be deleted because of repeating the limitations in independent claim 1.

Claim 2, line 20, "a controller" should be changed to -- said controller --.

Claim 3, lines 9-11, "a start circuit for generating a high voltage pulse and for superimposing the high voltage pulse on the AC voltage" should be deleted because of repeating the limitations in independent claim 1.

Claim 3, line 20, "a controller" should be changed to -- said controller --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

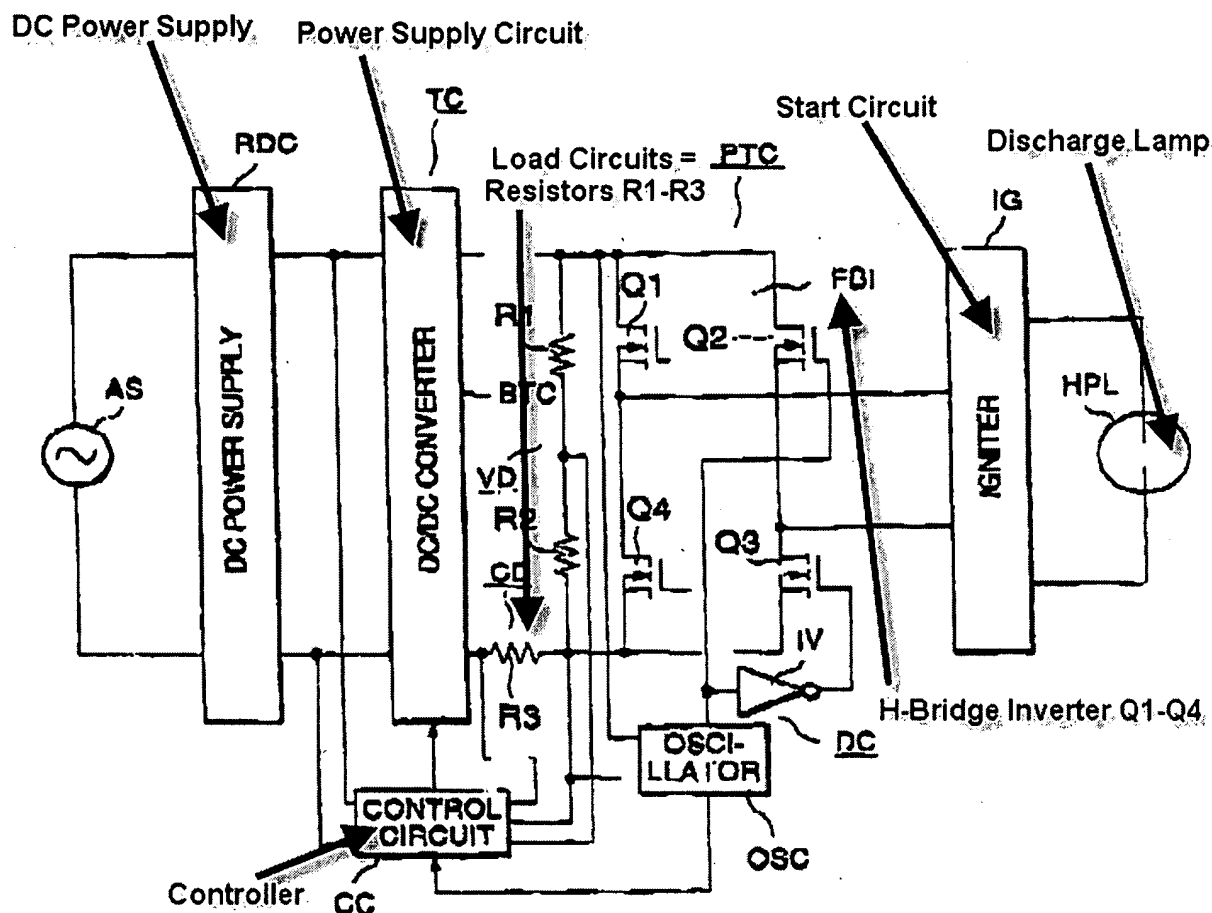
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yuda et al. (U.S. 6,504,323 B2).

With respect to claim 1, Yuda discloses in figure 6 a discharge lamp ballast apparatus comprising a power supply circuit (TC – DC/DC converter) for converting a voltage from a DC power supply (RDC – DC power supply), which is connected to a plurality of load circuits (a plurality of load circuits [R1-R3] connecting to the power supply circuit and the DC power supply), and for converting the prescribed DC voltage (the input DC voltage of the inverter [Q1-Q4]) to an AC voltage (an output AC voltage of the inverter) to be supplied to a discharge lamp (HPL); a start circuit (IG – igniter) for generating a high voltage pulse (column 12, lines 64-65) and for superimposing the high voltage pulse on the AC voltage to start discharge of the discharge lamp (HPL); and a controller (CC – control circuit) for controlling a current (an output current supply of the DC power supply [TC]) supplied from the DC power supply in response to a total value of currents (column 12, lines 30-55) flowing through the plurality of load circuits (R1-R3).



Allowable Subject Matter

5. Claims 2-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior art of record fails to disclose or fairly suggest the following limitations:

- A discharge lamp ballast apparatus further comprising first load current detecting means for detecting a load current value flowing through the primary side of the transformer; and a total current detector for detecting a total current value of a

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load current value detected by the first load current detecting means and a load current value detected by the second load current detecting means, in combination with the remaining claimed limitation as claimed in dependent claim 2 (claims 4-8 are objected for depending on claim 2).

- A discharge lamp ballast apparatus further comprising load current detecting means provided to a plurality of discharge lamp ballast circuits connected to the DC power supply for detecting individual load currents flowing through the plurality of discharge lamp ballast circuits; and a total current detector for detecting a total current value flowing into the plurality of discharge lamp ballast circuits in response to the load current values detected by the load current detecting means, in combination with the remaining claimed limitation as claimed in dependent claim 3.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamauchi et al. (U.S. 2004/0113567 A1) discloses an electronic ballast for a high pressure discharge lamp.

Konishi et al. (U.S. 6,281,642 B1) discloses a ballast for a discharge lamp with false deactivation detection.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung X. Le whose telephone number is 571-272-6010. The examiner can normally be reached on 8:30 AM - 5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on 571-272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner
Tung Le
AU 2821



TRINH DINH
PRIMARY EXAMINER

March 18, 2007